#### VARIANCE / FIELD CHANGE NOTICE

Significant?

(Yes or No): NO

V/F: 20300-PSP-0008-1

Page: 1 of 4 5225

WBS NO.: PROJECT/DOCUMENT/ECDC # 20300-PSP-0008 Rev. 2

PROJECT TITLE: Project Specific Plan for Real-Time Scan of Paddys Run Corridor and **Associated Drainage Features** 

Date: 11/20/03

## VARIANCE / FIELD CHANGE NOTICE (Include justification):

This Variance/Field Change Notice (V/FCN) documents the collection of physical samples from 6 locations along the slopes of the Storm Sewer Outfall Ditch (SSOD) to confirm and bound above-FRL readings for radium-226 and thorium-232 recorded by the real-time HPGe. See Figure 1.

Physical samples will be collected per SMPL-01 from 6 locations on the slopes of the SSOD to confirm and bound real-time HPGe above-FRL readings. Angle of penetration will be perpendicular to the slope. All locations will be advanced to a depth of 1.5 feet below the surface with samples being collected at all three 6" intervals.

The sampling and analytical requirements as well as target analyte lists are identified in Attachment 1. The samples to be collected and their corresponding identifiers area shown in Attachment 2

Each core will be scanned using a frisker. If the frisker reading indicates an activity greater than 450 ccpm at the bottom depth (1.5 feet), then the boring will be advanced another 1.5 feet to a total depth of 3 feet and additional samples will be collected from all three 6" intervals. The sample identification will follow that in Attachment 2 with then next consecutive depth number.

Efforts should be made to eliminate debris and rocks from the samples so that the samples contain greater than 50 percent soil.

INFORMATION WIND

QC samples are not required.

Field validation is required.

Analytical validation is not required.

Historical data will be used for shipping. FACTS ID 200428854, Location D-2, total uranium = 25.7 mg/kg.

Surveying is not required because the coordinates will be defined by measuring from existing locations.

### Justification:

HPGe readings at these locations were between 1.7 and 13.33 pCi/g for radium-226 and were between 1.7 and 3.95 for thorium-232, which is greater than the FRLs of 1.7 pCi/g and 1.5 pCi/g respectively. According to Section 2.8 of the PSP, if the HPGe scans indicate readings greater than the FRL then these locations may be further investigated with physical sampling.

REQU	ESTED BY: Krista Flaugh			Date:	11/20/03			
K IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIAN	CE/FCN APPROVAL	DATE		
<	QUALITY ASSURANCE R Friske	11/24/03	X	PROJECT MANAG	8h-42/2:	11/24/03		
	DATA QUALITY MANAGEMENT		Χ.	1	ON MANAGER F. MANA	11/24/03		
(	analytical customer support	11/25/03		RTIMP Manager				
`	Lenda Bondon 11/26			SAMPLING MANAGERA BUTINGE				
VARIANCE/FCN APPROVED [X]YES []NO				REVISION REQUIRED: [']YES [x]NO				
		DISTRI	BUTION	1				
ROJECT	MANAGER:	DOCUMENT ÇONTROL	OCUMENT CONTROL: Jeannie Rosser			OTHER:		
UALIT	Y ASSURANCE:	CHARACTERIZATION	MANAGE	R: Frank Miller	OTHER:			
IELD M	ANAGER:	OTHER:		1, 1	OTHER:			

ORIGINA

# ATTACHMENT 1 SAMPLING AND ANALYTICAL REQUIREMENTS

TAL A 20300-PSP-0008-A

COMPONENT	MDL
Total Uranium	8 mg/kg
Radium-226	0.17 pCi/g
Radium-228	0.18 pCi/g
Thorium-228	0.17 pCi/g
Thorium-232	0.15 pCi/g
Thorium-230	28 pCi/g
Technetium-99	2.91 pCi/g

Analyte	Method	Sample Matrix	Lab	TAT*	ASL	Preservative	Holding Time	Container	Sample Volume/Mass
TAL A	Gamma Spectroscopy, Liquid Scentillation, or GPC	Solid	Offsite	30 days COAs only	В	None	12 months	Plastic or stainless steel core liner or glass or polyethylene sample container	i buu arams -

<sup>\*</sup>TAT signifies when the data is due back to the project, irrespective of data entry into the database.

### **ATTACHMENT 2**

Location	Sample Interval (feet)	Sample ID	TAL	Northing	Easting
	0 - 0.5	SSOD-RTC-1^1-R	Α		1349074
SSOD-RTC-1	0.5 - 1.0	SSOD-RTC-1^2-R	A	477793.2	
	1.0 - 1.5	SSOD-RTC-1^3-R	A		
	0 - 0.5	SSOD-RTC-2^1-R	Α		1349081
SSOD-RTC-2	0.5 - 1.0	SSOD-RTC-2^2-R	А	477738	
	1.0 - 1.5	SSOD-RTC-2^3-R	A		
	0 - 0.5	SSOD-RTC-3^1-R	А		1349061.3
SSOD-RTC-3	0.5 - 1.0	SSOD-RTC-3^2-R	А	477666	
	1.0 - 1.5	SSOD-RTC-3^3-R	A		
	0 - 0.5	SSOD-RTC-4^1-R	Α		1349097
SSOD-RTC-4	0.5 - 1.0	SSOD-RTC-4^2-R	А	477813.6	
	1.0 - 1.5	SSOD-RTC-4^3-R	Α		
	0 - 0.5	SSOD-RTC-5^1-R	А		1349097
SSOD-RTC-5	0.5 - 1.0	SSOD-RTC-5^2-R	А	477789	
	1.0 - 1.5	SSOD-RTC-5^3-R	Α		
	0 - 0.5	SSOD-RTC-6^1-R	А		
SSOD-RTC-6	0.5 - 1.0	SSOD-RTC-6^2-R	Α	477770.8	1349101
	1.0 - 1.5	SSOD-RTC-6^3-R	Α		

### Where

SSOD = Storm Sewer Outfall Ditch

RTC = Real-Time Confirmation

1, 2, 3 = Location

^ = distinguishes between the Location ID and the Sample ID

1, 2, 3 = depth intervals (2 time the bottom depth

R = Radiological Constituents

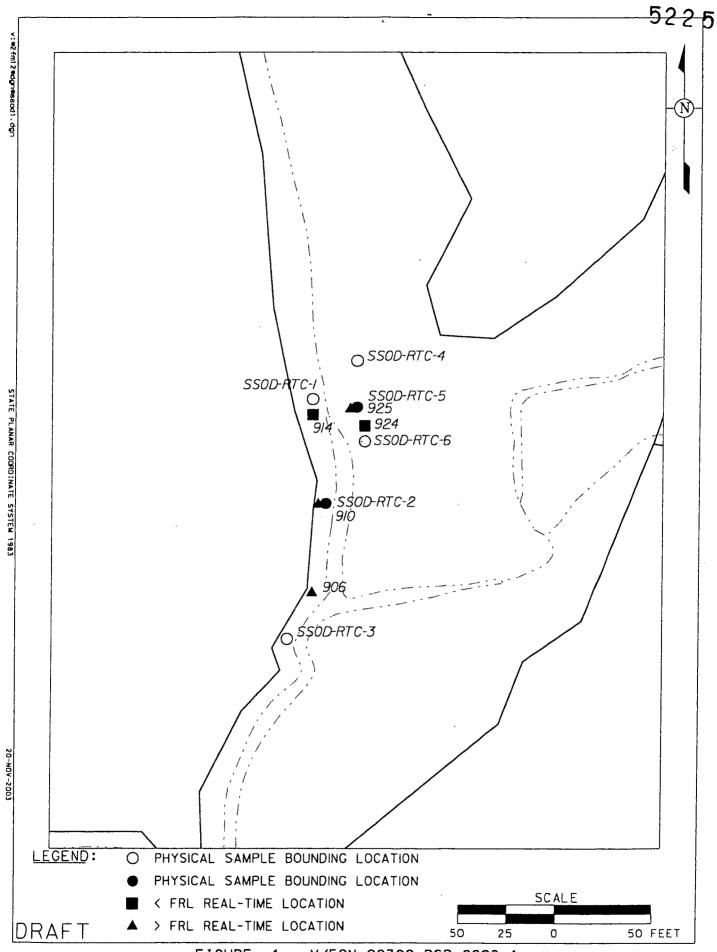


FIGURE 1. V/FCN 20300-PSP-0008-1